

### REMARKS

Please reconsider the rejections of the claims in light of the amendment and the following arguments and allow the pending claims.

A Request for Reconsideration was filed on November 1, 2002, after the Final Office Action. The Examiner issued an Advisory Action (paper no. 9) dated November 13, 2002, stating that the arguments in the Request for Reconsideration had not placed the application in condition for allowance. In that Office Action, the Examiner rejected all the claims as obvious in view of U.S. Patent No. 4,619,734 to Andersson ("Andersson") as further evidenced by U.S. Patent No. 3,293,114 to Kenaga *et al.* ("Kenaga") and Technical Bulletin No. 13.

The Examiner contends in the Advisory Action (paper no. 9) that the present claims were obvious in light of U.S. Patent No. 4,619,734 to Andersson because, as stated by the Examiner:

*"Regarding the opacity of the tissue: the independent claims only indicate that the tissue is opaque, not the level of opacity of it. Opacity is a property of the papers, including tissues and all the papers including tissues have an opacity. Since the level or range of opacity has not been claimed, then any tissue would read on that particular limitation."*

In light of the Advisory Action, it appears that the Examiner would be in favor of a claim limitation that more particularly defines the increased opacity for the present invention. Therefore, in light of the Examiner's comments, applicants have amended independent claims 1 and 11 to further reflect the opacity exhibited by the paper products of the present invention. If the Applicant's interpretation of the Examiner's statements in the Advisory Action were incorrect, the undersigned suggests an interview with the Examiner to clarify any remaining issues.

Specifically, the present invention discloses a process for increasing the opacity of tissue products by adding thermally expandable microspheres into the wet end of a tissue manufacturing process. (Page 1, lines 9-14). The incorporation of microspheres results in a tissue product that is better able to scatter light, which translates into a higher opacity over the same basis weight material that does not contain thermally expandable microspheres. (Page 10, lines 10-13).

A. **The Andersson reference does not render Applicants' invention obvious under 35 U.S.C. § 103(a) because the light-scattering coefficient limitation of Applicants' claims is not taught by Andersson.**

Andersson does not render the presently-claimed invention obvious under 35 U.S.C. § 103(a) because all the limitations of the amended claims are not present in Andersson and are not suggested by Andersson.

Andersson teaches the use of thermally expandable microspheres to increase paper bulk, bulk softness and surface softness. However, Andersson does not teach the use of thermally expandable microspheres to increase the opacity (*i.e.*, light-scattering coefficient) of tissue products. Accordingly, Andersson's paper products may have had increased bulk and increased softness, but Andersson's paper products would not have had a light-scattering coefficient of at least 36.41, as required by the claims of the present application.

Support for amendments to claims 1 and 11 can be found in the present application on page 16 in table 1. In Example No. 2, table 1, the addition of 0.5 % Expancel microspheres gave a light-scattering coefficient ( $\text{m}^2/\text{kg}$ ) of 36.41. In Example

No. 4, the addition of 1.0 % Expancel microspheres gave a light-scattering coefficient ( $\text{m}^2/\text{kg}$ ) of 40.69. A light-scattering coefficient measurement is directly related to a paper product's level of opacity. (Page 4, lines 5-10 and Page 9,10 lines 27-30, 1-3).

Andersson does not address the issue of opacity and does not teach or suggest whether the addition of microspheres *increases or decreases* the opacity of the product claimed therein. Thus, a person with ordinary skill in the art is left without any guidance or motivation to add microspheres to the high bulk value paper of Andersson in order to gain an increase in the light-scattering coefficient of the tissue product to at least 36.41.

Applicant's respectfully submit that the now claimed limitations of opaque tissue products having an increase in the light-scattering coefficient of the tissue product to at least 36.41 provide a basis for patentability of the present invention over Andersson. Applicants respectfully request the Examiner to reconsider the rejection of claims 1-17 and allow the amended claims to issue.

In summary, it is respectfully submitted that the amended claims are patentably distinct over the reference cited by the Examiner and meet all other statutory requirements of patentability. Applicants submit that the present Application is in complete condition for allowance and respectfully request that a patent issue based on the above-captioned application.

Please charge any additional fees required by this Request for Continued  
Examination and Preliminary Amendment to Deposit Account No. 50-2548.

Respectfully requested,

NELSON MULLINS RILEY & SCARBOROUGH

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